functions of the various parts of the plant: environment, plant diseases, the propagation of plants, transplanting, pruning, plant breeding, etc. As an appendix a syllabus of laboratory work is given.

As previously mentioned, the information given is usually reliable, but those who know something of plant relationship and also those who have had experience in grafting plants will question the statement on page 216 that "the fir and linden have been grafted."

The device shown in Fig. 152, intended to help start newly transplanted trees into growth; consisting of a flask containing distilled or rain water, connected by a rubber tube with the cut off end of a root, will hardly commend itself to the practical man.

The numbered paragraphs, with cross references constitute a valuable feature of this work and should be of great assistance in helping the student to come to a good understanding of the subject. The illustrations are generally good, and a full index adds greatly to the value of the book.

Montague Free

The review of Piper and Beattie's Flora of the Northwest Coast appearing in June Torreya stated that The New Era Printing Co. issued the book. This was an error as "The entire edition is owned and controlled by the State College of Washington," Pullman, Washington, to whom purchasers are referred.

-En.

PROCEEDINGS OF THE CLUB

MARCH 29, 1916

The meeting of March 29, 1916, was held in the morphological laboratory of the New York Botanical Garden at 3:30 P.M. President Harper presided. Twenty-seven persons were present.

The minutes of February 23 and March 14 were read and approved.

The following persons were nominated for membership: Mr. Paul W. Graff, 1775 North Ave., Bridgeport, Conn., Dr. James R. Weir, Bureau of Plant Industry, Missoula, Mont., Mr. Robert V. Evans, University of Montana, Missoula, Mont., and Mr. E. C. McCarty, University of Montana, Missoula, Mont.

The resignation of Miss May A. Parker was read and was referred to the Secretary for further correspondence.

The first number on the announced scientific program, "A New Part of the North American Flora," W. A. Murrill, was postponed.

B. O. Dodge read a short paper on "Converse Inoculation Experiments in Gymnosporangium."

Mr. Paul W. Graff followed with a paper on "Plant Diseases in the Philippines." He spoke of the more important diseases attacking crops of economic importance.

"The sugar cane is particularly subject to the attack of the redrot caused by *Colletotrichum fulcatum*. The "cane smut" and "eye-spot" diseases are also quite common on this host. Budrot has been reported as attacking the cocoanut. The leaf spot caused by *Pestalozzia palmarum* may at times become severe enough to materially weaken the host. The raising of coffee has been almost entirely given up in the Islands because of the inroads of *Hemileia vastatrix*. The banana, one of the most important crops to the native, is attacked by the bacterial disease common to the West Indies and Central America. Rice is troubled by the attack of *Ustilaginoides virens* and sterility, the cause of which is unknown.

The growing period is the time of greatest infection, therefore the time to spray for disease prevention to do the greatest amount of good and in the most economical manner would be during the first three weeks of the rainy season and a like period at its close."

Dr. N. L. Britton who had recently returned from a botanical exploration of the Isle of Pines made a preliminary report of the results of his investigations.

Adjournment followed.

B. O. Dodge,

Secretary

APRIL 11, 1916

The meeting of April 11 was held in the lecture room of the department of Botany, Columbia University, at 8:15 P.M. President Harper presided. Thirty-five persons were present.

The lecture of the evening was given by Dr. A. F. Blakeslee on "Sexuality of the Mucors." The lecture was illustrated by lantern slides. The speaker gave a brief account of the life history of some of the common moulds and explained in some detail the meaning of the terms + and - strains and how it is possible to determine the sex of these strains. Specimens showing zygospore formation and pure cultures of different species were exhibited.

Meeting adjourned.

B. O. Dodge,

Secretary

APRIL 26, 1916

The meeting was held in the Morphological Laboratory of the New York Botanical Garden at 3:30 P.M. President Harper presided. Twenty-one persons were present.

The minutes of the meetings held March 29 and April 11 were read and approved. The treasurer announced a gift of \$100 from Miss Caroline Haynes to be applied to the Underwood Fund. The gift was accepted with a rising vote of thanks to Miss Haynes for this generous contribution.

Miss Sophia Taistra, Garden Street, Hoboken, N. J., Mr. J. T. Beals, 71 West 23d Street, N. Y. City, and Mr. Henry Thurston, New Milford, N. J., were nominated for membership.

A motion by Dr. Barnhart to appropriate the sum of twenty dollars (\$20.00) as a compensation to the chairman of the field committee in consideration of his work in connection with the duties of his committee, was carried.

The first number on the scientific program was a paper on "The Genus Mycena," by Dr. William A. Murrill.

The genus *Mycena* has been much neglected because the species are very small fungi and of little economic value. The characteristics of the genus are mostly negative. The margin of the pileus is appressed, the gills are adnate or adnexed. The cap is fleshy, thin, and does not revive. The stipe is carti-

laginous. The relationships of the genus may be seen by comparison with the following genera: Clitocybe has a fleshy stipe; Collybia has an incurved margin; Omphalia has decurrent gills; Marasmius has a tough reviving cap; Galactropus has a milky juice.

The generic name *Prunulus* has been adopted to include most of the species formerly classified under the genus *Mycena*. Fifty North American species of this genus have heretofore been described. Fifty-five new species have been found and will be described in a forthcoming part of the North American Flora.

Dr. Roland M. Harper followed with a paper on "An Interesting Fern Locality in Florida Threatened with Destruction." The following abstract was furnished by the speaker:

"In the southeastern corner of Citrus County, Florida, there is a small area of limestone cliffs and grottoes where ten or twelve species of ferns grow on a single acre. They are mostly tropical species or near relatives thereof, and most of them are not known elsewhere within many miles. The rocks afford a treacherous footing and some accidents have occurred there, at least one of them fatal. The locality was visited by Curtiss in 1881, Donnell Smith in 1883, Underwood in 1891 and the speaker in 1915. A limestone quarry has recently been opened nearby and the destruction of the vegetation seems to be imminent."

Dr. George E. Stone, of the Agricultural College of Massachusetts, spoke of the nature of the work at the Station, and the great interest in the subject of shade-tree planting throughout the State.

Dr. N. L. Britton spoke of the new journal *Addisonia* founded by the Addison Brown fund and published by the New York Botanical Garden. This journal will be issued quarterly.

Dr. Britton exhibited an interesting specimen of *Carex Fraseri*, now in blossom at the New York Botanical Garden.

Adjournment followed.

B. O. Dodge,

Secretary